

REMARKS

Initially, in the Office Action dated March 1, 2004, the Examiner rejects claims 5 and 13 under 35 U.S.C. §112, second paragraph. Claims 8-10 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,097,733 (Basu et al.). Claims 1-4, 6 and 7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over EP 0981229 A2 (Hwang et al.) in view of Basu et al. Claim 13 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Basu et al. in view of Hwang et al.

Claims 11 and 12 have been objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form. Claim 5 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph.

By the present response, Applicants have amended claims 1, 5, 8, 9 and 12 to further clarify the invention. Claims 1-13 remain pending in the present application.

Allowable subject matter

Applicants thank the Examiner for indicating that claims 11 and 12 would be allowable if rewritten in independent form and that claim 5 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph. Applicants have amended claim 5 to further clarify the invention to put this claim in condition for allowance.

35 U.S.C §112 Rejections

Claims 5 and 13 have been rejected under 35 U.S.C. §112, second paragraph. Applicants have amended claim 5 to further clarify the invention. Applicants submit that in claim 13 the term "said indication" finds antecedent basis in claim 8 where it is recited "information transmitted from said first stations which indicates" Accordingly, Applicants respectfully request that these rejections be withdrawn.

35 U.S.C. §102 Rejections

Claims 8-10 have been rejected under 35 U.S.C. §102(e) as being anticipated by Basu et al. Applicants respectfully traverse these rejections.

Basu et al. discloses a communication system that provides wireless voice and multimedia communications and includes a base station, a plurality of wireless mobile units and a bandwidth allocator. The base station provides wireless coverage throughout a service area and has a bandwidth for providing the wireless coverage. The plurality of wireless mobile units operate within the service area and communicate with the base station to transmit and receive both voice communications and multimedia communications. The bandwidth allocator selectively allocates the bandwidth in response to wireless multimedia communication requirements to achieve a minimum transmission rate for multimedia communications. The communication system may include a plurality of channels, each having a channel bandwidth with the bandwidth allocator selectively allocating

the channels in response to the multimedia communication requirements to achieve the minimum transmission rate.

Regarding claim 8, Applicants submit that Basu et al. does not disclose or suggest the limitations in the combination of this claim of, *inter alia*, a controller for controlling the allocation of communication resources among links connecting a second station to a plurality of first stations, or the allocation being performed in accordance with information transmitted from the first stations which indicates a need for communication resources. The Examiner asserts that Basu et al. discloses a controller for controlling the allocation of communication resources at fig. 2 and col. 7. lines 11-28. However, these portions of Basu merely disclose the elements in a Basu system and that the Base Switching Center includes a service interface having a bandwidth allocation unit that operated with bandwidth allocation units located within multimedia interfaces in the wireless mobile units. This is not a controller for controlling the allocation of communication resources among links connecting a second station to a plurality of first stations, as recited in the claims of the present invention. These portions of Basu disclose a bandwidth allocation unit that allocates the bandwidth. This is not a controller that allocates communication resources.

Moreover, Basu does not disclose or suggest the allocation being performed in accordance with information transmitted from said first stations which indicates a need for communication resources. The Examiner asserts that these limitations are disclosed in fig. 7 and col. 12, line 1 to col. 13, line 3. However, these portions of Basu merely disclose operation of the Basu system in establishing and initially

allocation bandwidth to the wireless mobile units where “the base station determines the nature of the access request” and whether voice bandwidth or multimedia interface bandwidth is required. Again, these portions of Basu relate to bandwidth. This is not communication resources needed by a first station. The wireless mobile units in Basu do not send a need for bandwidth to the base station, but simply requests either voice or multimedia. The base station then determines the bandwidth needed. This has nothing to do with communication resources needed by a first station, as recited in the claims of the present application. Further, the claims of the present invention relate to a first station, a second station, and a controller that is separate and independent from the first station and the second station. In contrast, Basu merely discloses a base station and wireless mobile units where the allocation unit is contained in the base station.

Regarding claims 9 and 10, Applicants submit that these claims are dependent on independent claim 8 and, therefore, are patentable at least for the same reasons noted regarding this independent claim.

Accordingly, Applicants submit that Basu et al. does not disclose or suggest the limitations in the combination of each of claims 8-10 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. §103 Rejections

Claims 1-4, 6 and 7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Hwang et al. in view of Basu et al. Applicants respectfully traverse these rejections.

Hwang et al. discloses controlling asymmetric dynamic radio bearers in a mobile packet data communications system that involves use of the radio bearers for the specified data rate corresponding to the data rate according to the radio packet data service to activate a predetermined number of radio bearers only according to the amount of transmit data and vary the data rate, thereby making it possible to efficiently use the radio resources and prevent excessive power consumption and signal interference.

Regarding claim 1, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of this claim of, *inter alia*, controlling communication resources in a transmission from a first network element to a second network element that includes monitoring an indication of future need of communication resources in said first network element, or sending the indication from the first network element to the controller, or controlling the communication resources between the first network element and the second network element based on this indication, or where the controller is separate and independent from the first network element and the second network element. Hwang fails to overcome the substantial defects noted previously regarding Basu. The system presented in Hwang is

different from the field of present invention. In the system of Hwang, medium access control (MAC) for the uplink is performed by the mobile station, consequently, there is no indication transmitted from the mobile station to the network. Load estimation is made and used for access control in the mobile station using locally available information. In contrast, according to the present application, an uplink controller is located in the network, which does not have a real-time information on current load. A transmit buffer state is only known at setting up the radio channels but any changes cannot be followed leading to inappropriate channel allocation. According to the claims of the present application the controller is located in the network and performs the monitoring and sending. These operations are not performed locally in the mobile station, as is disclosed in Hwang.

Moreover, Applicants assert that Hwang is an incorrect prior art reference because of the above differences. The present invention relates to controlling communication resources in a transmission from a first network element to a second network element across a network where the communication resources are allocated by a controller in the network. In contrast, Hwang relates to controlling asymmetric dynamic radio bearers in a mobile packet data communications system to make it possible to efficiently use the radio resources and prevent excessive power consumption and signal interference. The environment in which present invention is used does not fall into the area of Hwang. Therefore, Applicants submit that one of ordinary skill in the art would have no motivation to combine Basu with Hwang in an attempt to achieve the claimed invention. The Examiner admits that Hwang does not

disclose or suggest a controller but asserts that Basu discloses this limitation.

However, as noted previously, Basu also fails to disclose or suggest this limitation in the claims of the present application. Further, the controller is separate and independent from the first network element and the second network element.

Regarding claims 2-4, 6 and 7, Applicants submit that these claims are dependent on independent claim 1 and, therefore, are patentable at least for the same reasons noted regarding this independent claim.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 1-4, 6 and 7 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 13 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Basu et al. in view of Hwang et al. Applicants submit that this claim is dependent on independent claim 8 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim. Hwang et al. does not overcome the substantial defects noted previously regarding Basu et al.

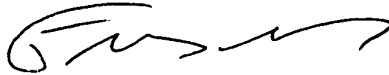
Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 13 of the present application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-4, 6-10 and 12-13 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing attorney docket no. 0172.39287X00).

Respectfully submitted,

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